#### PROCEEDINGS

OF THE

### BIOLOGICAL SOCIETY OF WASHINGTON

# THE VOLES OF THE SUBGENUS CHILOTUS, WITH DESCRIPTIONS OF NEW SPECIES.

#### BY C. HART MERRIAM.

Heretofore only a single species of Baird's subgenus *Chilotus* has been recognized—the 'Arvicola oregoni' of Bachman, which inhabits the coast region of Oregon.

While making a Biological survey of the Crater Lake region, in the southern part of the Cascade Range in Oregon, last August, Mr. Vernon Bailey and I secured a new member of the group. It is apparently an alpine species and differs strikingly from M. oregoni in much paler coloration and shorter tail. A third form, also having a short tail, but much darker than either oregoni or the Crater Lake species, was obtained by Mr. Streator at Agassiz, in British Columbia. The three forms constitute a very compact group (subgenus Chilotus Baird), differing from all the other Voles in a combination of characters which have been so recently summarized by Mr. Gerrit S. Miller, Jr., in his admirable paper on The Genera of Voles and Lemmings\* that it is unnecessary to repeat them here. The subgenus is restricted to the northwest coast region, where it ranges from the northwestern corner of California (Crescent City) to southern British Columbia (Port Moody and Agassiz). The extreme northern and southern limits of its range have not been determined. M. bairdi is clearly a mountain animal, confined to the Cascade Range, but the data at present available are not sufficient to admit of mapping the distinctive ranges of oregoni and serpens.

<sup>\*</sup> North Am. Fauna, No. 12, pp. 60-62, July, 1896.

The three species here recognized agree almost exactly in size, the only difference being that the tail of *oregoni* is about 10 millimeters longer than that of either of the others. In color *oregoni* holds an intermediate position, *bairdi* being the palest and *serpens* the darkest of the three.

Following are descriptions of the known species:

## Microtus oregoni (Bachman.)

Arvicola oregoni Bachman, Journ. Acad. Nat. Sci., Phila., VIII, pt. 1, 60–61, 1839.

Type locality.—Astoria, Oregon.

General characters.—Size rather small; pelage short and coarse with a decided 'pepper and salt' appearance; tail longer and ears more prominent than in the other members of the subgenus.

Color.—Upper parts brownish bister; under parts dark, more or less washed with buffy; tail blackish above, paler below.

Cranial characters.—Compared with the other known members of the subgenus (bairdi and serpens) the braincase is narrower, less flattened, and less subquadrate, the interparietal larger and more squarely rectangular, the zygomata more strongly bowed outward, the frontal more distinctly grooved interorbitally, and the ascending arms of the premaxillæ longer.

Measurements.—An adult ♂ from type locality: total length, 140; tail vertebræ, 42; hind foot, 17.

## Microtus bairdi sp. nov.

Type from Glacier Peak, Crater Lake, Oregon (altitude about 7800 feet, or 2350 meters). No. 79906, ♀ ad., U. S. Nat. Mus., Biological Survey collection. Collected August 24, 1896, by C. Hart Merriam and Vernon Bailey. Original No. 5813.

General characters.—Size small, a little smaller than M. oregoni; ears and tail rather short; coloration pale.

Color.—Upper parts uniform rather pale grayish bister, with a faint reddish brown cast, and glossy; under parts whitish, the plumbeous basal fur showing through; tail bicolor; dark above, whitish beneath; feet soiled whitish; nose dusky.

Cranial characters.—Skull rather small and flat; braincase subquadrate (broad in type specimen); zygomata bowed well outward; rostrum short; audital bullæ large and well rounded; incisive foramina short, not reaching nearly to incisors. Compared with M. oregoni the rostrum as seen from above is much shorter.

The dental characters are those of the subgenus Chilotus.

Remarks.—This interesting new Vole may be distinguished at a glance from M. oregoni by its shorter ears and tail and very much paler color. I have named it in honor of Professor Baird, who first recognized and named the subgenus.

Measurements.—Type specimen ( $\varphi$  adult): total length, 131; tail vertebræ, 33; hind foot, 17.5. A young adult  $\sigma$  from type locality: total length, 130; tail vertebræ, 32; hind foot, 17.

#### Microtus serpens sp. nov.

Type from Agassiz, British Columbia. No. 76303, ♂ ad., U.S. Nat. Mus., Biological Survey collection. Collected December 2, 1895, by Clark P. Streator. Original No. 5068.

General characters.—Similar to M. oregoni, but tail much shorter; color darker; pelage much softer and longer (10 mm. or more on back in winter specimens); ears buried in the long fur.

Color.—Upper parts very dark brown, becoming almost dusky on posterior half of back, and everywhere profusely mixed with black-tipped hairs; under parts dark plumbeous, the belly washed with ashy or buffy; tail dusky above, pale below, and faintly edged and tipped with whitish when seen from above (due to the projection of the whitish hairs of the under side).

Cranial characters.—Skull similar to that of M. oregoni, but slightly larger; interorbital region less 'pinched in;' interparietal tapering off more gradually on each side; teeth larger; crowns of molar series longer.

Measurements.—Type specimen: total length, 130; tail vertebræ, 31; hind foot, 18. Average of seven specimens from type locality: total length, 130; tail vertebræ, 32; hind foot, 17.5.